UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,121	01/28/2000	Satoshi Miyaguchi	40782-5075	1823

9629 7590 11/20/2002

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER
HAYNES, MACK NELSON

ART UNIT	PAPER NUMBER
2879	

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/493,121	Applicant(s) MIYAGUCHI ET AL.	
	Examiner Mack N. Haynes	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S. C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Haskal et al. (5,952,778).

With regards to claims 1 and 10, Fig. 2 as well as col. 2, line 20-col. 4, line 65 of Haskal et al. discloses an organic EL cell for preventing moisture that deteriorates the light-emitting characteristics of the organic EL cell as well as a method for manufacturing the organic EL cell, comprising: a substrate (8); a laminate structure formed on the substrate (See col. 3, lines 10-15), wherein the laminate structure

includes at least an anode (6), an organic light emitting layer (2), a cathode (4); a first sealing film formed on the laminate structure (32 of silicon dioxide, (See col. 3, lines 45-56); and a second sealing film (16 of polyethylene) formed on the first sealing film (See col. 3, lines 57-63).

With regards to claims 2 and 11, Haskal discloses the first sealing film is an inorganic passivation film (silicon dioxide) and the second sealing film is a resin film (polyethylene).

With regards to claims 3 and 12, Fig. 2 of Haskal further comprises a third sealing film (36) formed on the second sealing film, wherein the third sealing film is an inorganic passivation film (See col. 3, lines 64-65 as well as col. 4, lines 58-65, wherein inorganic film is glass which is comprised of silicon dioxide).

With regards to claims 4 and 13, Haskal discloses the first sealing film and the third sealing film as being SiO_2 (See col. 3, lines 45-56 and 64-65, wherein glass is comprised of silicon dioxide).

With regards to claim 9, Fig. 2 of Haskal discloses first and third sealing films.

Note- this claim recites a product-by process limitation; and for product-by process limitations, determination of patentability is based on the product itself (a first sealing film and a third sealing film) and not the process limitation (formed by vapor deposition). More specifically, if a product-by process limitation is the same as or obvious from the product of the prior art, the claim is unpatentable even though the prior product was made by a different process (See MPEP 2113). Consequently, Haskal

discloses first and third inorganic sealing films which are the same as the applicants' claimed sealing films.

Claims 1, 5, 6-10 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (6,198,217).

With regards to claims 1 and 10, Fig. 1 of Suzuki et al. discloses an organic EL cell for preventing moisture that deteriorates the light-emitting characteristics of the organic EL cell as well as a method for manufacturing the organic EL cell, comprising: a substrate (24); a laminate structure formed on the substrate, wherein the laminate structure includes at least an anode (10), an organic light emitting layer (14), a cathode (18); a first sealing film formed on the laminate structure (20); and a second sealing film formed on the first sealing film (22).

With regards to claims 5 and 14, Suzuki et al. discloses the first sealing film (20) is resin film and the second sealing film (22) is an inorganic passivation film (See col. 5, line 49-col. 6, line 6).

With regards to claims 6 and 15, Fig. 2 of Suzuki et al. discloses the organic EL cell further comprising a third sealing film (30) formed on the second film, wherein the third sealing film is a resin film (See col. 7, lines 49-60).

With regards to claims 7 and 16, Suzuki et al. discloses the second sealing film is selected from a group consisting of silicon nitride, SiO_2, and Al_2O_3 (See col. 7, lines 28).

With regards to claims 8-9, Figs. 1 and 2 of Suzuki et al. disclose a second sealing film (22) as well as a first (20) and a third sealing film (30).

Note- claims 8-9 recite a product-by process limitation; and for product-by process limitations, determination of patentability is based on the product itself (a first sealing film, a second sealing film and a third sealing film, respectively) and not the process limitation (formed by vapor deposition). More specifically, if a product-by process limitation is the same as or obvious from the product of the prior art, the claim is unpatentable even though the prior product was made by a different process (See MPEP 2113). Consequently, Suzuki et al. discloses first, second and third sealing films that are the same as the applicants' claimed sealing films.

With regards to claim 17, col. 7, lines 20-26 of Suzuki et al. discloses the second sealing film (22) being formed by vapor deposition.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (6,198,217).

With regards to claim 18, col. 6, lines 34-39 of Suzuki et al. disclose the first sealing film (20) being formed by vapor deposition; yet, Suzuki et al. does not specifically discuss the third sealing film (30) being formed by vapor deposition.

However, the use of vapor deposition in order for the purpose of forming or depositing a layer on a portion of an object is notoriously well known of common knowledge in the art.

Hence, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a well known vapor deposition technique to form and deposit the third sealing film of Suzuki et al. over the organic EL cell of Suzuki et al.

With regards to claims 19-22, Suzuki et al. discloses the inorganic passivation film (22) as being comprised of silicon nitride and formed by a vapor deposition technique (See col. 7, lines15-28); yet, Suzuki et al. does not specifically discuss the vapor deposition technique being a plasma CVD method involving a raw material gas composed only of silane and nitrogen.

However, CVD methods involving raw material gas composed of only silane and nitrogen to form and deposit a silicon nitride layer is notoriously well known and of common knowledge in the art.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the silicon nitride inorganic passivation layer (22) by well known vapor deposition technique such as plasma CVD involving a raw material gas composed of only silane and nitrogen.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shi et al. (5,811,177), Yamashita et al. ('405 and '204) disclose EL devices that are encapsulated with protective layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mack N. Haynes whose telephone number is (703) 308-5460. The examiner can normally be reached on Mon-Fri., 9:00a.m.-5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (703) 305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MICHAEL H. DAY
PRIMARY EXAMINER